IN THE SPECIFICATION:

Replace the paragraphs on page 38, lines 2-15, with the following paragraph:

A decomposition technique, for solving combinational constraint expressions, is presented. Decomposing a set of constraints can increase the opportunities for dividing them into independent sets that do not need to be conjoined in a constraint-solving process using a BDD representation. An AND decomposition, relying on a Theorem 1, is presented. An OR decomposition, relying on a corollary of Theorem 1, is presented. Theorem 1 provides an operation to test for, and create, a pair of sub-constraints G and H which are independent in any two variables x_0 and x_1. A decomposition procedure is presented for separating as many variables as possible, of an input constraint, into disjoint sub-constraints. A merging procedure is presented, that can be used if a decomposition does not only contain constraints whose support sets are disjoint from each other. The decomposition procedure can also be used to identify hold constraints.